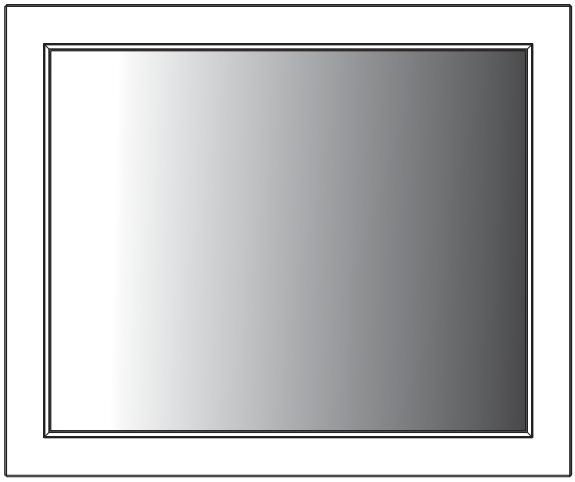
USER MANUAL

VERSION V1.4 February 2010

Point-of-Sale Hardware System



Manual Version 1.4
Part Number:

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Safety

IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical power supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

CE MARK

This device complies with the requirements of the EEC directive 2004/108/EC with regard to “Electromagnetic compatibility” and 2006/95/EC “Low Voltage Directive”.

FCC

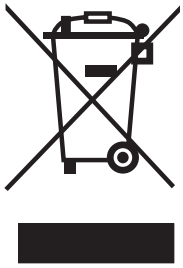
This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

LEGISLATION AND WEEE SYMBOL

2002/96/EC Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dust bin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.
To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

Revision History

Changes to the original user manual are listed below:

Revision	Description	Date
1.0	• Initial release	May 2007
1.1	• Cover page. photo update • I/O view photo update • chapter4. reorganized and photo updated • chapter5. CPU support, Brightness, Touch Screen Type, Environment, Dimension, Mounting info updated • 2nd VGA added • Chapter8. photo updated	Oct. 2007
1.3	• B78 MB upgraded from v1.1 to B78 V2.2 • B98 MB V1.0 added • Drivers upgraded • 2nd Fan added for B98 • Specification changed (B98 MB added, HDD changed from PATA to SATA) • Driver CD photo updated to v1.9 • I/O changed from Line-in, Line-out to MIC-In, Line-Out • Jumper Settings upgraded • Photo of rear cover of system changed	Feb. 2009
1.4	• B68 motherboard added • Jumper setting updated	Feb. 2010

Table of Contents

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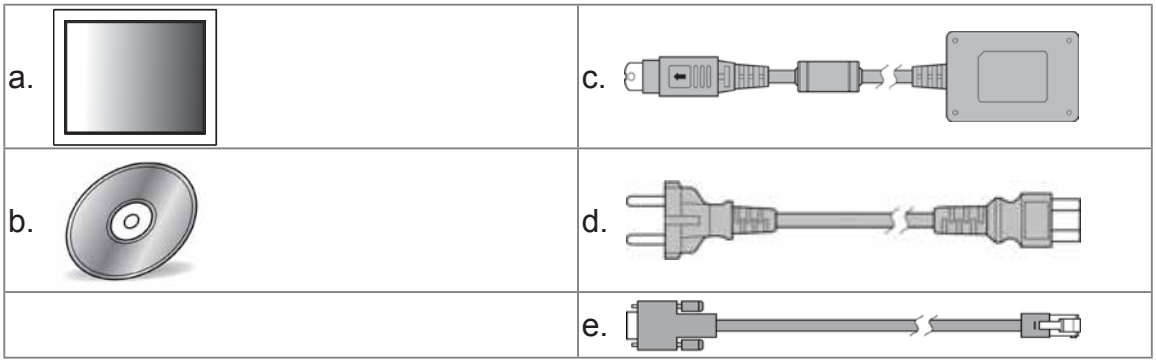
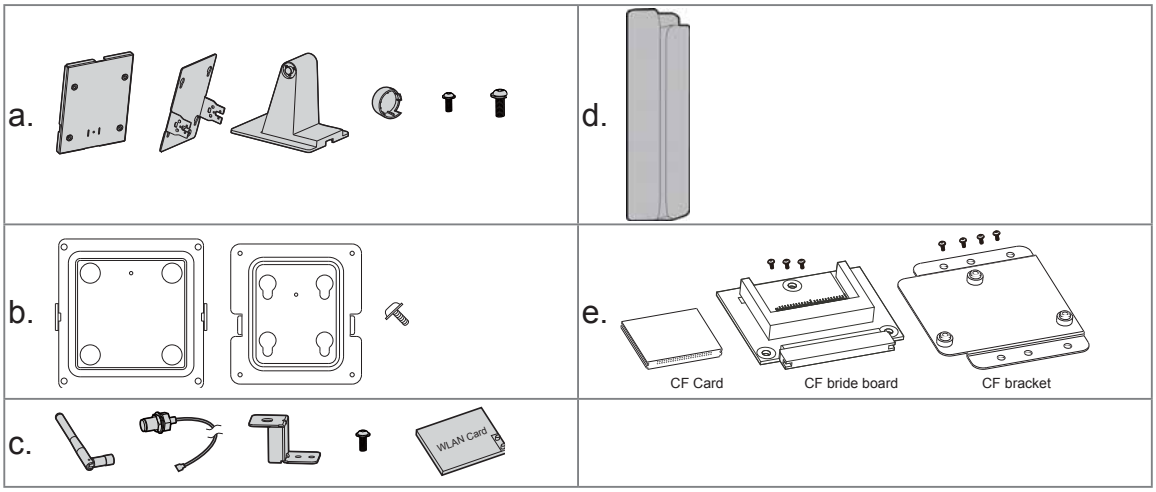
1. Packing List

1-1. Standard Accessories



a. System
b. Driver bank
c. Power adapter (90W)
d. Power cord
e. RJ45-DB9 cable (x2)

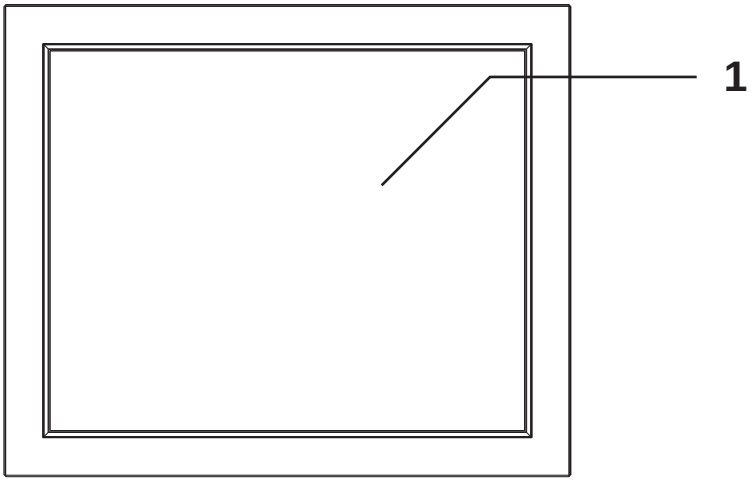
1-2. Optional Accessories



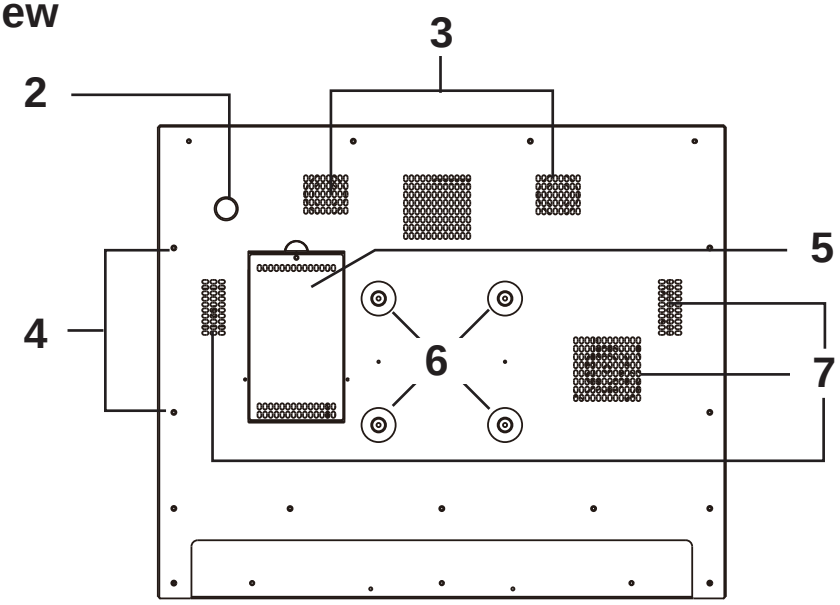
a. Desktop Stand Kit Module
b. Wall-mount Kit
c. Wireless LAN Card + External Antenna
d. MSR Module
e. CF Card Module

2. System View

2-1. Front View



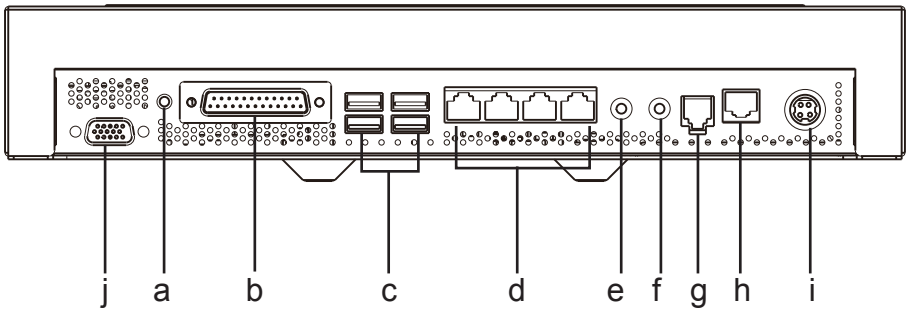
2-2. Rear View



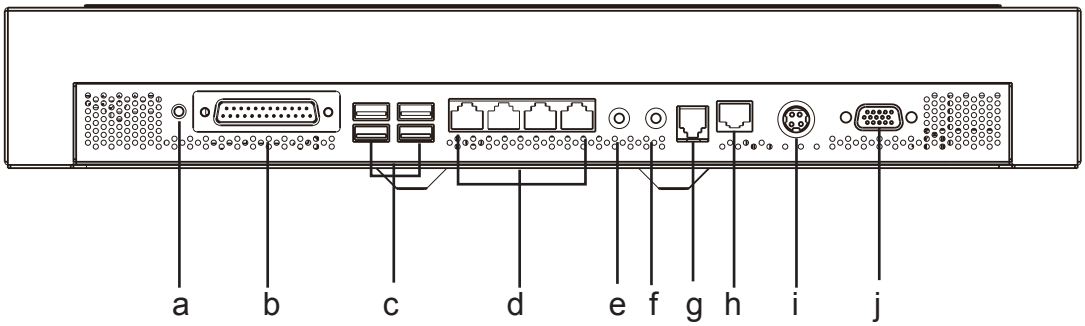
Item No.	Description
1	Touch screen
2	External antenna installation hole (Optional)
3	Speaker holes
4	MSR module installation place (Optional)
5	Hard drive disk door
6	VESA mounting screw holes
7	Ventilation holes

2-3. I/O Ports View

12" System



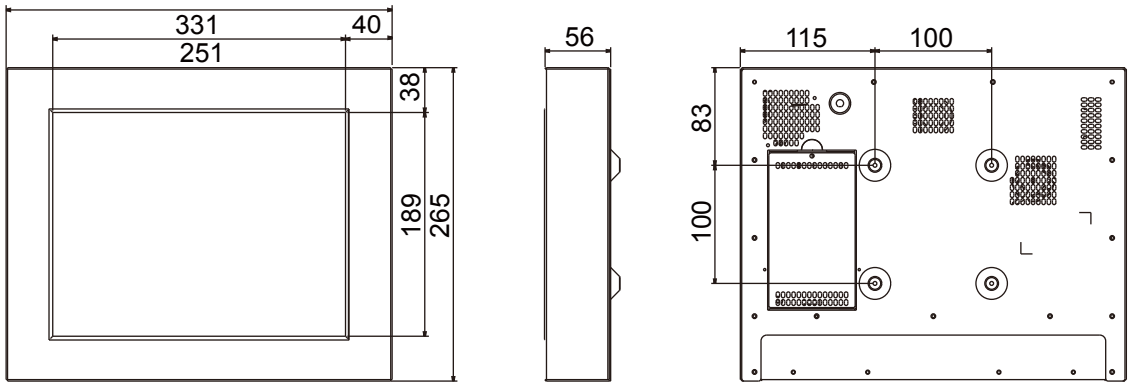
15", 17", 19" System



Item No.	Description
a	Power Switch
b	Parallel
c	USB x 4
d	COM 1, 2, 3, 4 (from right to left)
e	Line-out
f	MIC-in
g	Cash Drawer (support 12V/24V cash drawer)
h	LAN
i	DC-In
j	VGA Port

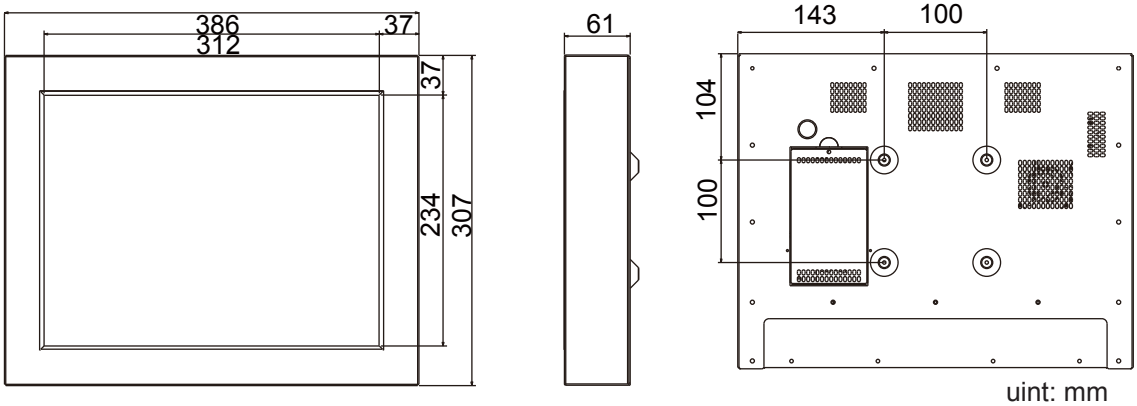
2-4. Dimensions

12" System



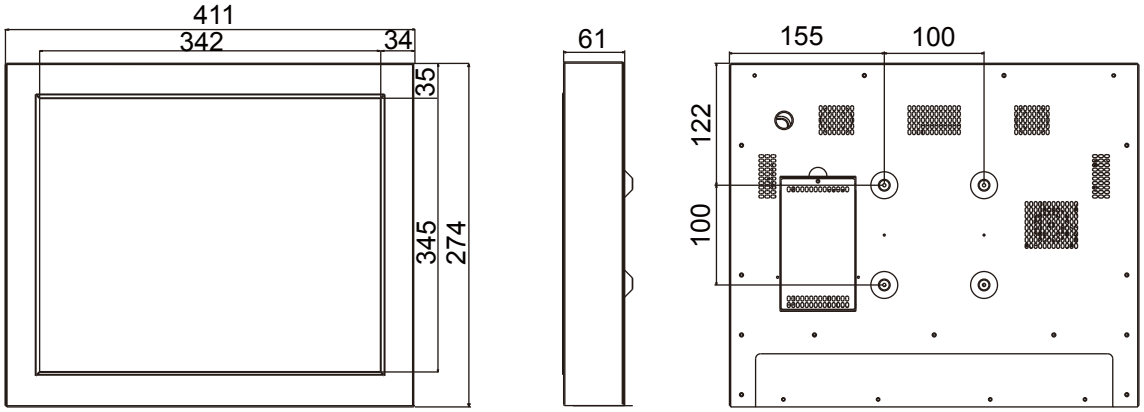
Unit: mm

15" System



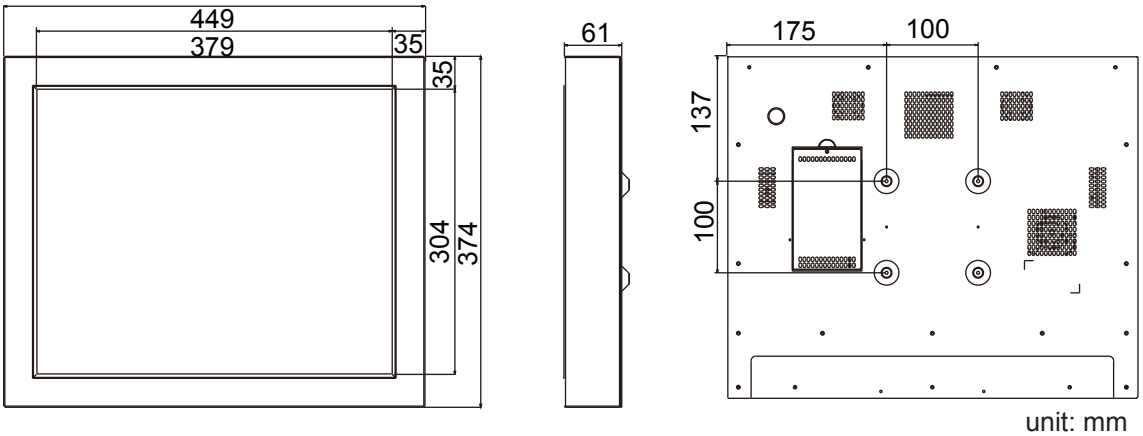
uint: mm

17” System



unit: mm

19” System



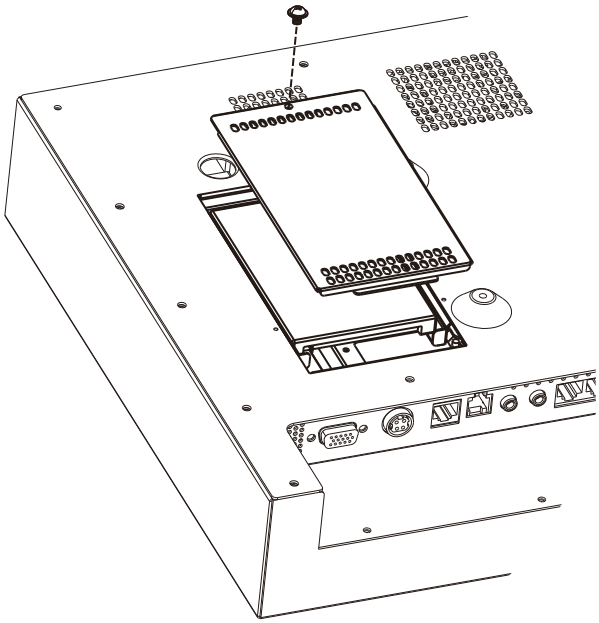
unit: mm

3. System Assembly

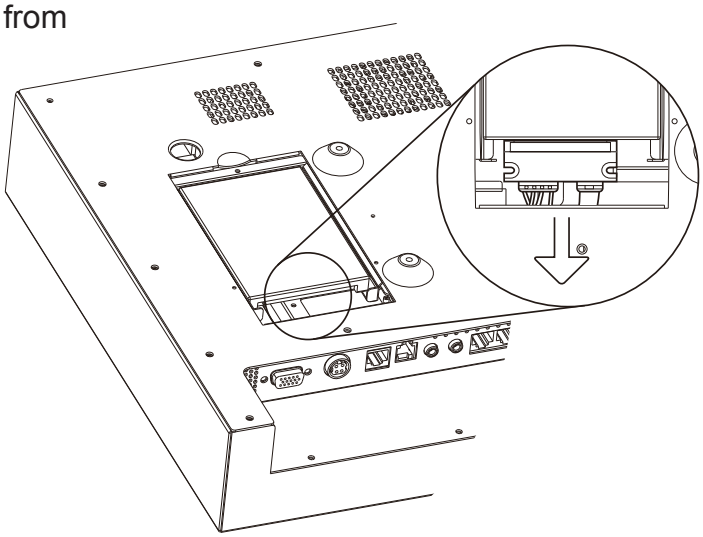
3-1. HDD Replacement

1. Turn to the rear side of the system.

2. Unscrew the screw (x1) securing the HDD door and the rear cover of the system.



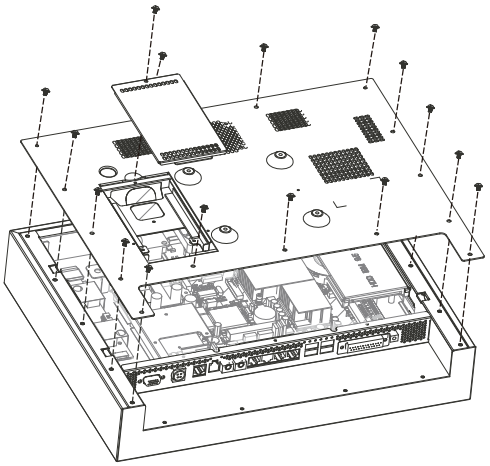
3. Disconnect the SATA cable from the drive.



3-2. RAM Replacement

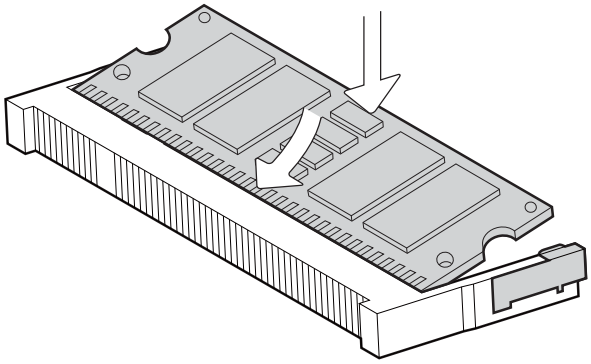
Please open the rear cover first then remove and replace the RAM module. You can refer to the motherboard layout to find the memory compartment. (See Chapter 6-1, Chapter 6-2 or Chapter 6-3 for different motherboard)

Opening the Rear Cover



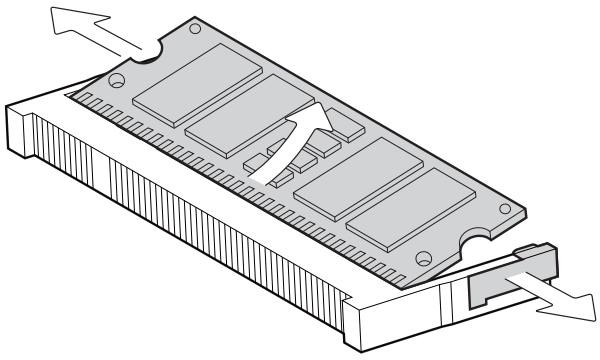
1. Remove the HDD (see Chapter 3-1) and unscrew the screws (x15) on the rear cover to access the motherboard.

Removing a RAM Module



2. Use both fingers to pull the ejector clips out of the sides of the module.
3. Slide the memory module out of the memory slot.

Installing a RAM Module

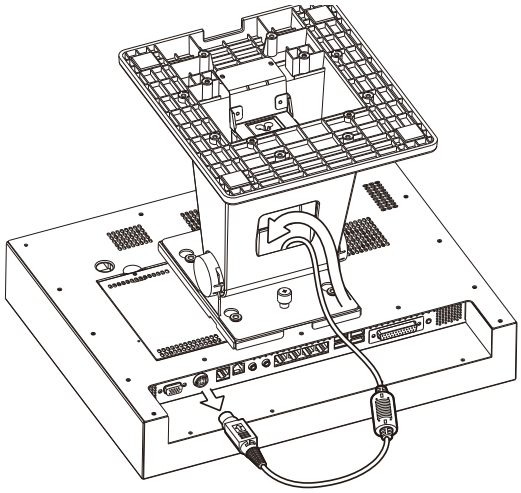


4. Slide the memory module into the memory slot and press down until the ejector clips click in place.

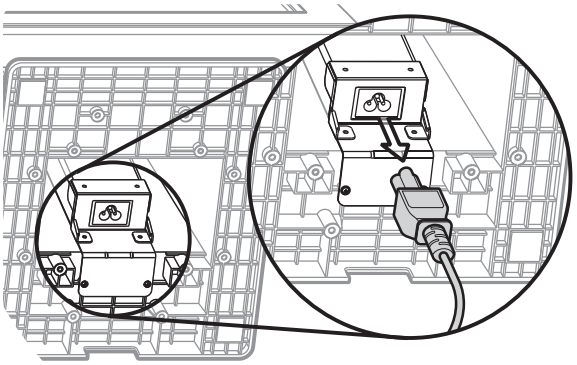
3-3. Power Adapter Replacement

If your system is equipped with a stand, please replace the power adapter by following the steps below.

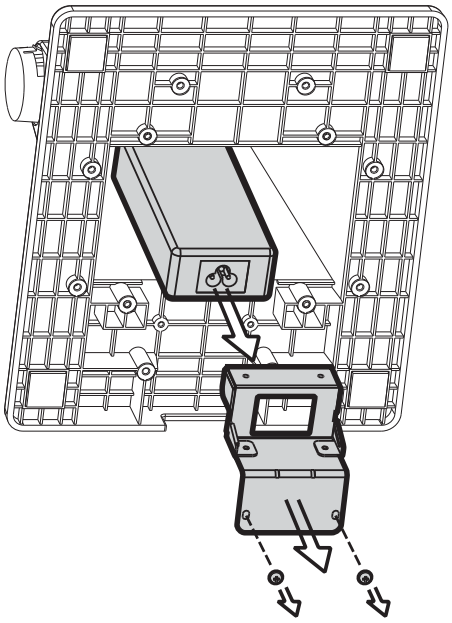
1. Disconnect the power cable from the I/O panel.
2. Route the power cable through the cable management hole on the stand as the direction of the arrow shows.



3. Disconnect the power cord from the power adapter which is fixed in the power adapter bracket pre-installed in the stand.



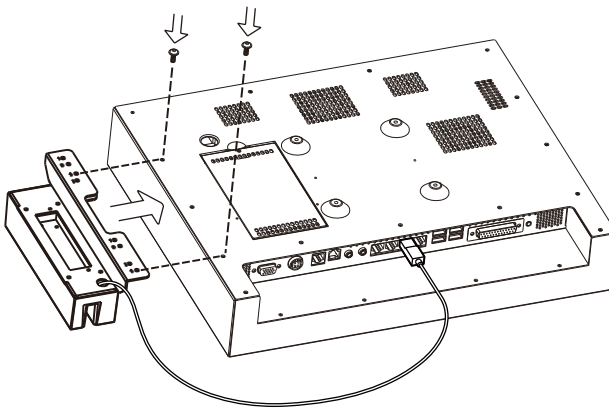
4. Loosen the screws (x2) to remove the power adapter bracket.
5. Gently pull the power adapter out of the cable management hole of the stand.
6. Replace the power adapter by reversing the procedure of above steps.



4. Peripheral Installation

4-1. MSR Installation

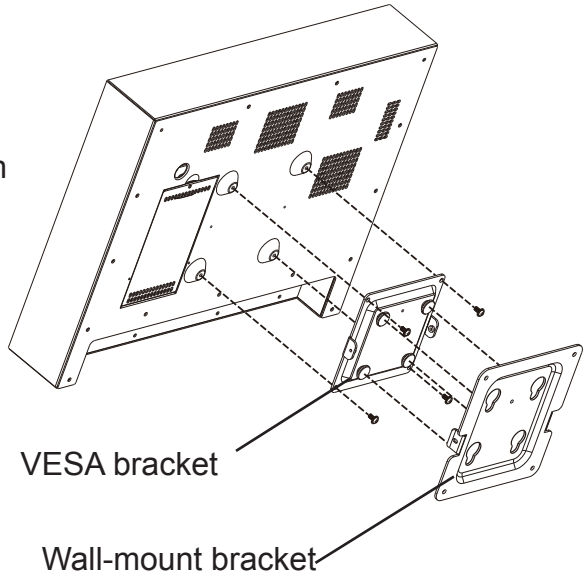
1. Turn the system to the rear side.
2. Attach the MSR module into the right position of the system and fasten the screws (x2).
3. Connect the MSR cable to the COM-RJ45 convertible connector on the I/O panel.



Note: Please set up the power setting for COM3 or COM4 with 5V, see Chapter 6 - Jumper Setting (page 22 for B78 motherboard, page 28 for B98 motherboard and page 34 for B68 motherboard)

4-2. Wall Mount Kit Assembly

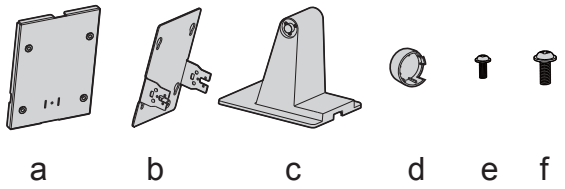
1. Fix the wall-mount bracket onto the wall.
2. Place the VESA bracket onto the VESA mounting holes on the system and fasten the screws (x4).
3. Align the VESA bracket with the system into the wall-mount brakcet and make sure they are well fixed.



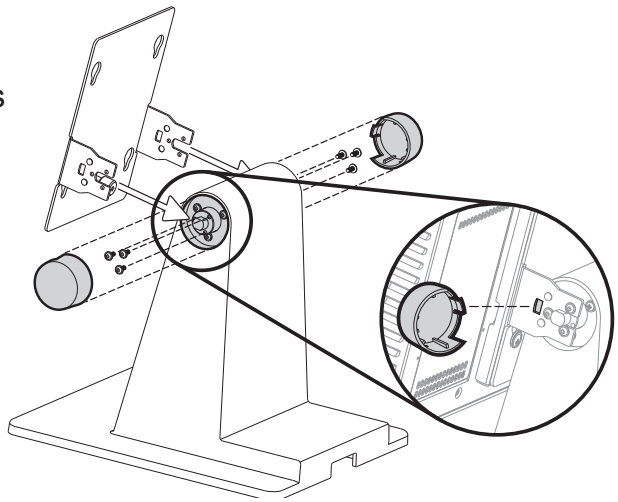
4-3. Desktop Stand Assembly

Accessories items

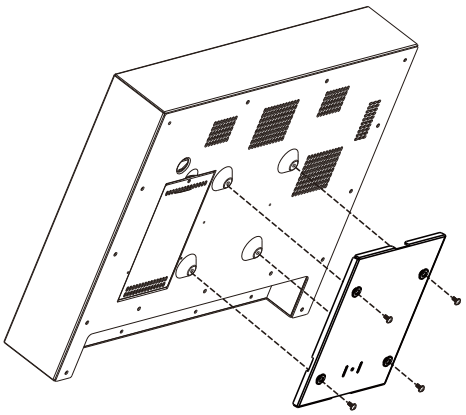
a. VESA bracket
b. Stand bracket
c. Stand
d. Hinge cover x2
e. Screws for both sides of stand x6
f. Screws for VESA bracket x 4



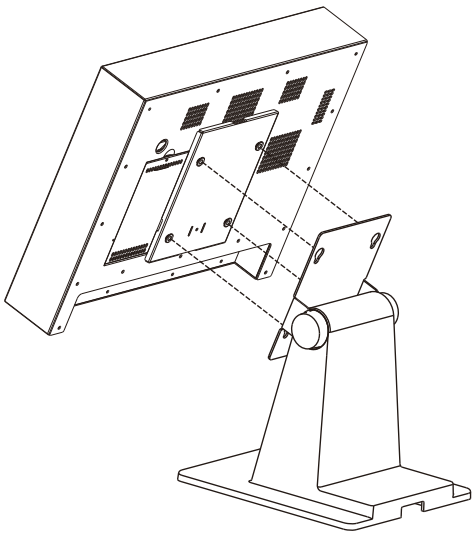
1. Align the guide slot of the stand bracket into the hinge shaft of the stand and fix them with the screws (x6).
2. Align the hinge cover (x2) into the right position of the stand bracket and fix it until you hear a click sound.



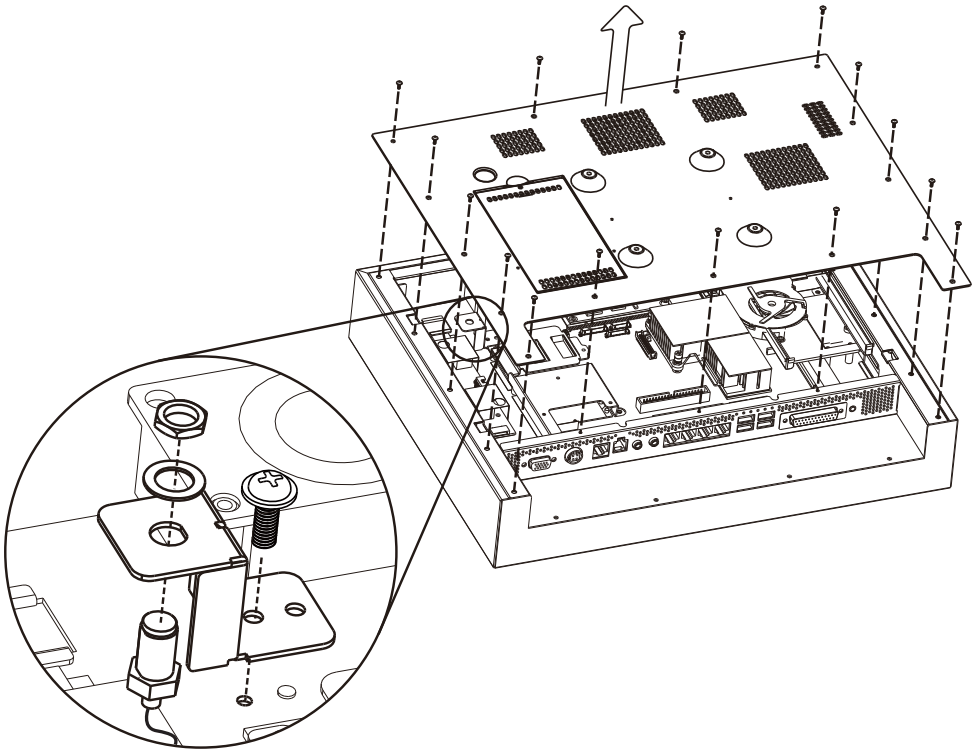
3. Align the VESA bracket onto the VESA mounting holes of the system and fasten the screws (x4).



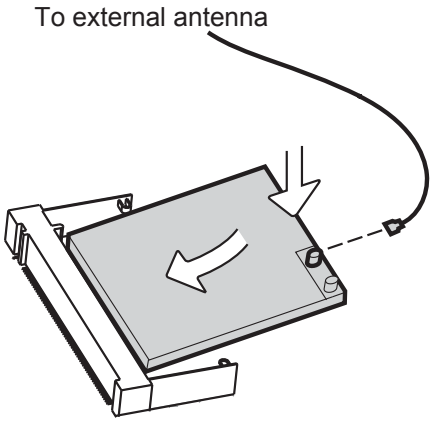
4. Align the VESA bracket with the system to the stand bracket and the stand, make sure they are well secured to each other.

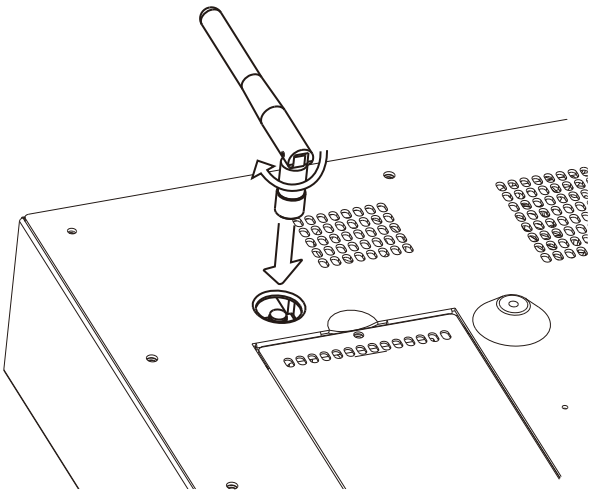


4-4. Wireless LAN Installation



1. Disconnect the HDD cable from the system first (see Chapter 3-1).
2. Unscrew the screws (x15) to remove the rear cover.
3. Assemble the antenna cable and bracket by fasten the nut, washer and the coaxial cable as picture instructs.
4. Insert the WLAN card to the WLAN socket on the motherboard and press it downward until the ejector clips lock it in place.
5. Connect the antenna cable to the “main connector” on the WLAN card.
6. Cover the rear cover by reversing the step 2.
7. The pre-drilled hole for the external antenna installation is on the rear cover of the system. Rotate the external antenna clockwise to fix it to the connector of the internal antenna cable.

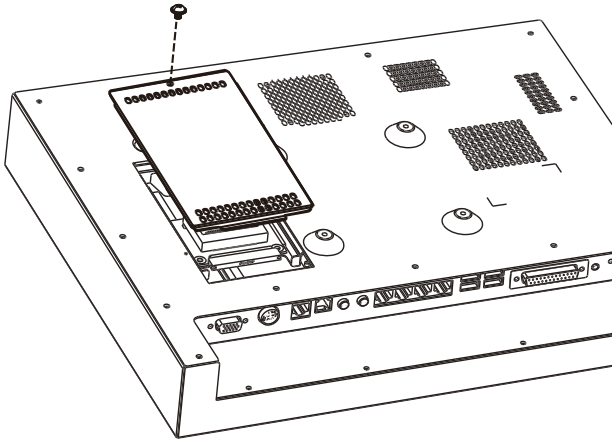




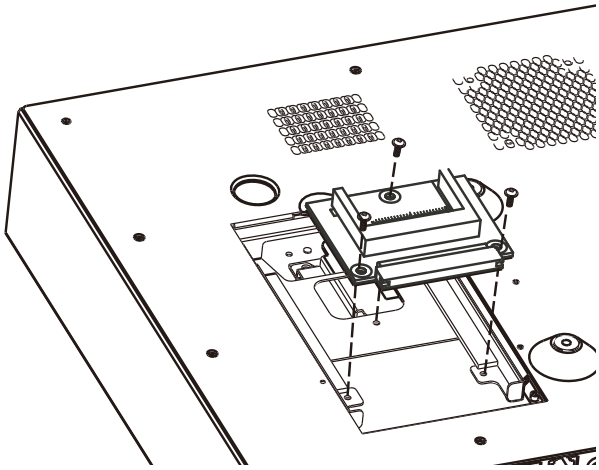
4-5. CF Card Module Installation

4-6. For system with vent

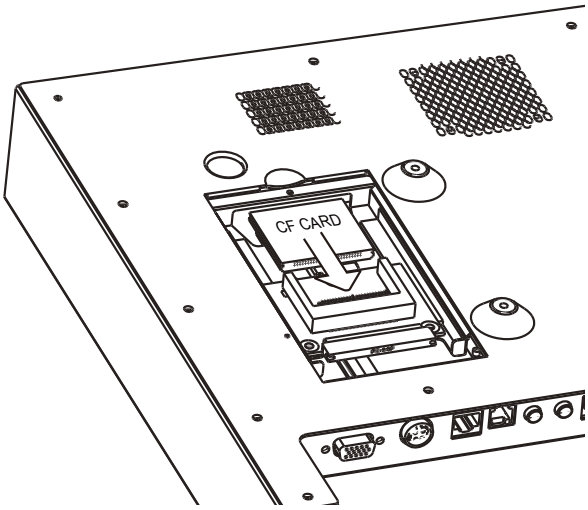
1. Turn over the system to access the HDD door.
2. Unfasten the screw (x1) to remove the HDD door.



3. Assemble the CF bridge board onto the HDD bay with the screws (x3).

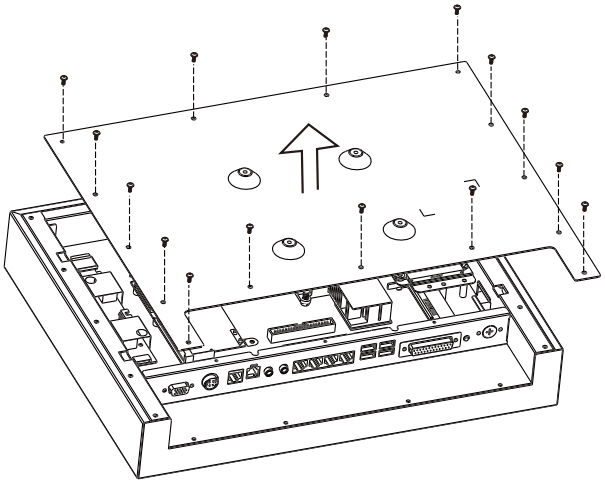


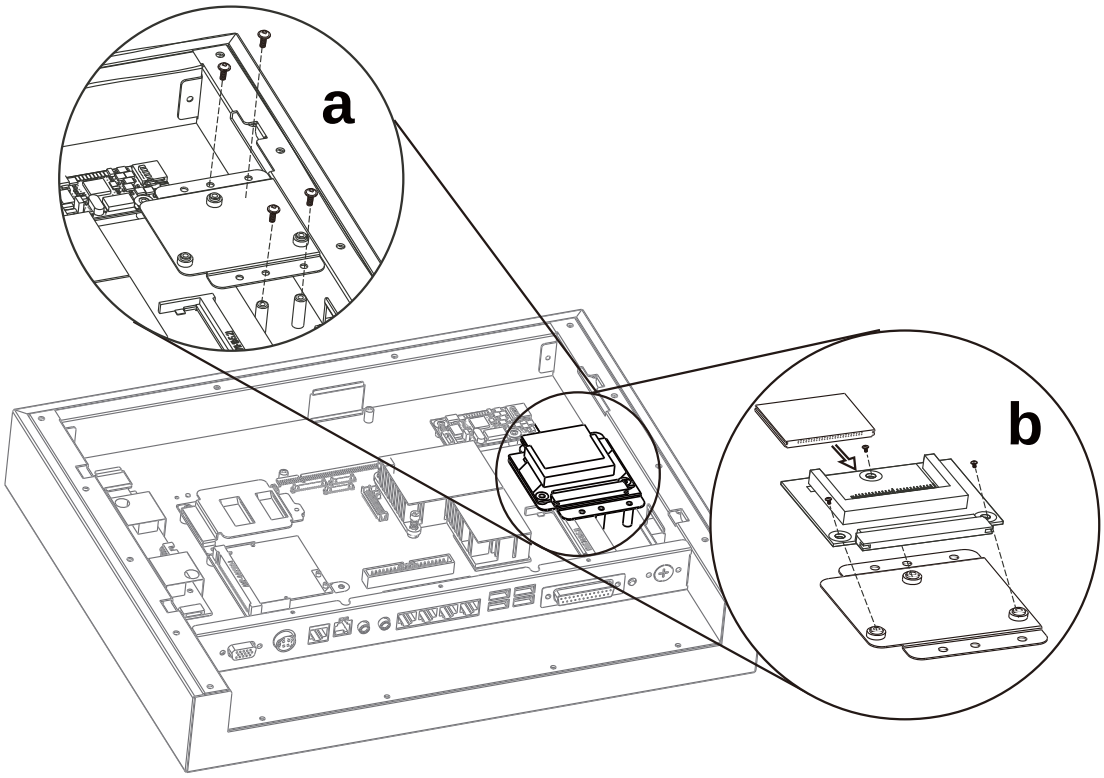
4. Replace the CF card by sliding it into or outward from the slot of CF bridge board.
5. Reverse the step 1 to cover the HDD door.



4-7. For ventless system

1. Turn over the system.
2. Open the rear cover by unfastening the screws (x15) to access the CF installaing place inside of the enclosure.
3. Place the CF bracket onto the bosses (x4) fixed on the LCD chassis with the screws (x4).
4. Assemble the CF bridge board and the CF bracket with the screws (x3) provided.
5. Slide the CF card into the slot of CF bridge board.
6. Reverse the steps by step 1 to cover the rear cover.



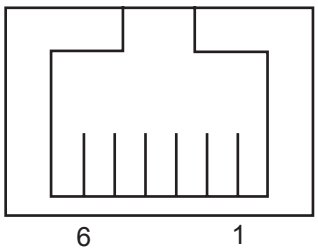


4-8. Cash Drawer Installation

4-8-1. For B78 motherboard

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

Cash Drawer Pin Assignment



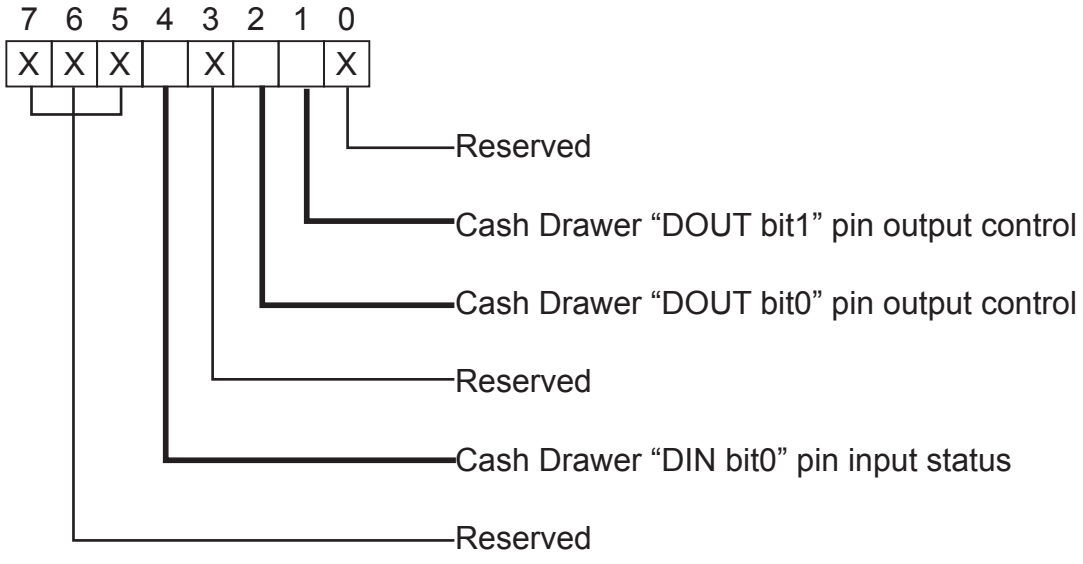
Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 24V
5	DOUT bit1
6	GND

Cash Drawer Controller Register

The Cash Drawer Controller use one I/O addresses to control the Cash Drawer.

Register Location: 4B8h
Attribute: Read / Write
Size: 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved			Read	Reserved	Write		Reserved



Bit 7: Reserved.
Bit 6: Reserved.
Bit 5: Reserved.
Bit 4: Cash Drawer “DIN bit0” pin input status.
= 1: the Cash Drawer closed or no Cash Drawer.
= 0: the Cash Drawer opened.
Bit 3: Reserved.
Bit 2: Cash Drawer “DOUT bit0” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow closing the Cash Drawer
Bit 1: Cash Drawer “DOUT bit1” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow closing the Cash Drawer
Bit 0: Reserved

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer

Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

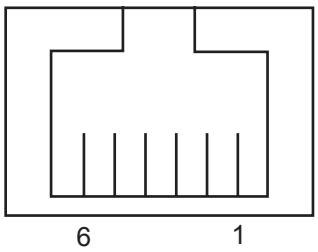
Command	Cash Drawer
O 4B8 04	Opening
O 4B8 00	Allow to closing
► Set the I/O address 4B8h bit2 =1 for opening the Cash Drawer by “DOUT bit0” pin control. ► Set the I/O address 4B8h bit2 = 0 to allow closing Cash Drawer.	

Command	Cash Drawer
I 4B8	Check status
► The I/O address 4B8h bit4 =1 means the Cash Drawer is closed or no Cash Drawer. ► The I/O address 4B8h bit4 =0 means the Cash Drawer is open.	

4-8-2. For B98/B68 motherboard

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

Cash Drawer Pin Assignment



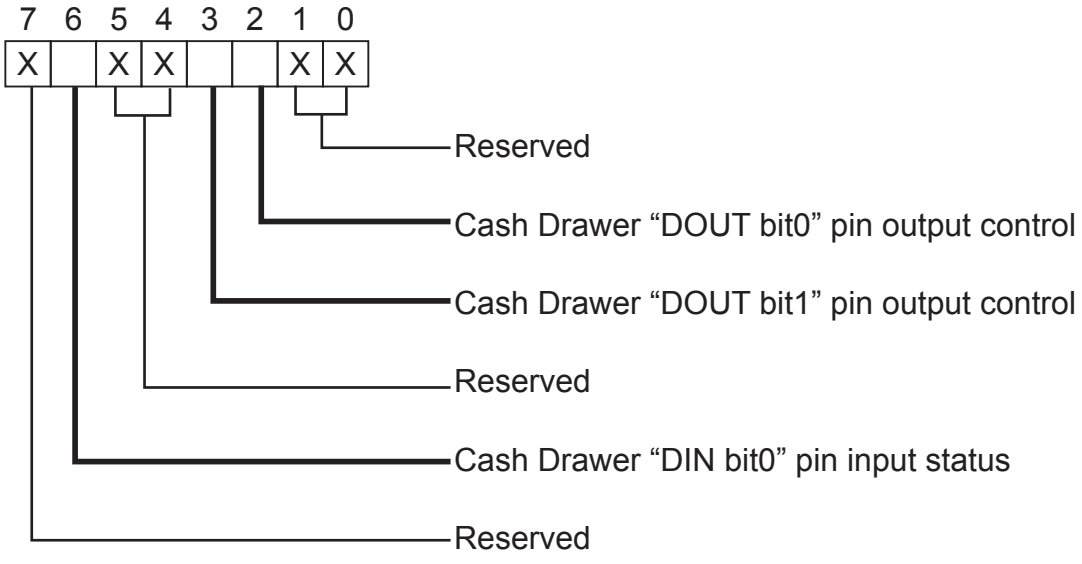
Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 24V
5	DOUT bit1
6	GND

Cash Drawer Controller Register

The Cash Drawer Controller use one I/O addresses to control the Cash Drawer.

Register Location: 48Ch
Attribute: Read / Write
Size: 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved		Read	Reserved	Write		Reserved	



Bit 7: Reserved
Bit 6: Cash Drawer “DIN bit0” pin input status.
= 1: the Cash Drawer closed or no Cash Drawer
= 0: the Cash Drawer opened
Bit 5: Reserved
Bit 4: Reserved
Bit 3: Cash Drawer “DOUT bit1” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow close the Cash Drawer
Bit 2: Cash Drawer “DOUT bit0” pin output control.
= 1: Opening the Cash Drawer
= 0: Allow close the Cash Drawer
Bit 1: Reserved
Bit 0: Reserved

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

Cash Drawer Control Command Example

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 48C 04	Opening
O 48C 00	Allow to close
► Set the I/O address 48Ch bit2 =1 for opening Cash Drawer by “DOUT bit0” pin control. ► Set the I/O address 48Ch bit2 = 0 for allow close Cash Drawer.	

Command	Cash Drawer
I 48C	Check status
► The I/O address 48Ch bit6 =1 mean the Cash Drawer is opened or not exist. ► The I/O address 48Ch bit6 =0 mean the Cash Drawer is closed.	

5. Specification

5-1. B78 motherboard Specification

Motherboard	B78			
CPU Supports	Intel Celeron M 1.5GHz; Pentium M 1.6GHz/1.8GHz			
Chipset	Intel 852GM and ICH4 FSB 400Mhz			
System Memory	2 x DDR SO-DIMM slot, up to 2 GB			
Graphic Memory	Share system memory max 64MB			
LCD / Touch Panel				
Model Name	K792	K795	K797	K799
LCD Size	12" TFT LCD	15" TFT LCD	17" TFT LCD	19" TFT LCD
Brightness	370nits	350nits	300nits	300nits
Maximal Resolution	800 x 600	1024 x 768	1280 x 1024	
Touch Screen Type	Resistive touch	Resistive type / SAW touch / IR Touch		
Storage				
HDD	2.5" Slim HDD bay, SATA HDD			
Flash Memory	1 Optional Compact Flash memory (without HDD)			
Expansion				
mini-PCI Slot	x1 (support 802.11 a/b/g WLAN card)			
External I / O Ports				
USB 2.0	4 x USB Type A			
Serial / COM	RJ-45 (COM1 standard RS-232; COM2 RS-232 / 422 / 485 selectable by jumper; COM3 & COM4 pin 9 with 5V or 12V power by jumper)			
Parallel	1 x D-sub 25F			
LAN (10 / 100/1000)	1 x RJ-45			
Cash Drawer	1 x RJ-11 (12V or 24V)			
DC Jack	1 x Latch Type			
Audio Jack	1 x MIC-in, 1 x Line-out			
2nd VGA	1 x DB 15F			
Internal Interface				
USB 2.0	2			
Audio				
Speaker	1 x 3W Speaker	2 x 3W Speakers		
Power				
Power Adapter	DC 19V / 90W			
Environment				
EMC & Safety	FCC Class A, CE, LVD			
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)			
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)			
Operating Humidity	5% - 95% RH non-condensing			
Storage Humidity	5% - 95% RH non-condensing			
Dust & Water Proof	NEMA 4 / IP 65 (front)			

Motherboard	B78			
Dimension (W x D x H)	331 x 265 x 55 mm 13" x 10.5" x 2.2"	386 x 308 x 60 mm 15.2"x 12.1"x 2.4"	411 x 345 x 60 mm 16.2" x 13.6" x 2.4"	449 x 374 x 60 mm 17.7" x 14.7" x 2.4"
Weight (N.W.)	4.7kgs / 10.4 lbs	5.8 kgs / 12.8 lbs	7.6 kgs / 16.7 lbs	9 kgs / 19.8 lbs
Mounting	100mm x 100mm Standard VESA / Panel Mount			
OS Support	Windows® XP, Windows XP Embedded, Windows XP Professional for Embedded, Windows 2000 professional Embedded, Linux			

5-2. B98 motherboard Specification

Motherboard	**B98**			
CPU Supports	Celeron M 1.86GHz;Core Due 2.0GHz;Core 2 Due 1.66GHz/2.16GHz			
Chipset	Intel 945GME+ ICH7M FSB 533MHz			
System Memory	2 x DDRII SO-DIMM slot, up to 4 GB			
Graphic Memory	Share system memory max 224MB			
LCD / Touch Panel				
Model Name	K792	K795	K797	K799
LCD Size	12" TFT LCD	15" TFT LCD	17" TFT LCD	19" TFT LCD
Brightness	370nits	350nits	300nits	300nits
Maximal Resolution	800 x 600	1024 x 768	1280 x 1024	
Touch Screen Type	Resistive touch	Resistive type / SAW Touch / IR Touch		
Storage				
HDD	2.5" Slim HDD bay, SATA HDD			
Flash Memory	1 Optional Compact Flash memory (without HDD)			
Expansion				
mini-PCI Slot	x1 (support 802.11 a/b/g WLAN card)			
External I / O Ports				
USB 2.0	4 x USB Type A			
Serial / COM	RJ-45 (COM1 standard RS-232; COM2 RS-232 / 422 / 485 selectable by jumper; COM3 & COM4 pin 9 with 5V or 12V power by jumper)			
Parallel	1 x D-sub 25F			
LAN (10 / 100/1000)	1 x RJ-45			
Cash Drawer	1 x RJ-11 (12V or 24V)			
DC Jack	1 x Latch Type			
Audio Jack	1 x Mic-in, 1 x Line-out			
2nd VGA	1 x DB 15F			
Internal Interface				
USB 2.0	2			
Audio				
Speaker	1 x 3W Speaker	2 x 3W Speakers		
Power				
Power Adapter	DC 19V / 90W			
Environment				
EMC & Safety	FCC Class A, CE, LVD			
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)			
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)			
Operating Humidity	5% - 95% RH non-condensing			
Storage Humidity	5% - 95% RH non-condensing			
Dust & Water Proof	NEMA 4 / IP 65 (front)			
Dimension (W x D x H)	331 x 265 x 55 mm 13" x 10.5" x 2.2"	386 x 308 x 60 mm 15.2"x 12.1"x 2.4"	411 x 345 x 60 mm 16.2" x 13.6" x 2.4"	449 x 374 x 60 mm 17.7" x 14.7" x 2.4"
Weight (N.W.)	4.7kgs / 10.4 lbs	5.8 kgs / 12.8 lbs	7.6 kgs / 16.7 lbs	9 kgs / 19.8 lbs
Mounting	100mm x 100mm Standard VESA / Panel Mount			
OS Support	Windows® XP Professional, Windows Embedded POSReady 2009, Windows XP Embedded, Windows XP Professional for Embedded, Windows 7, Linux			

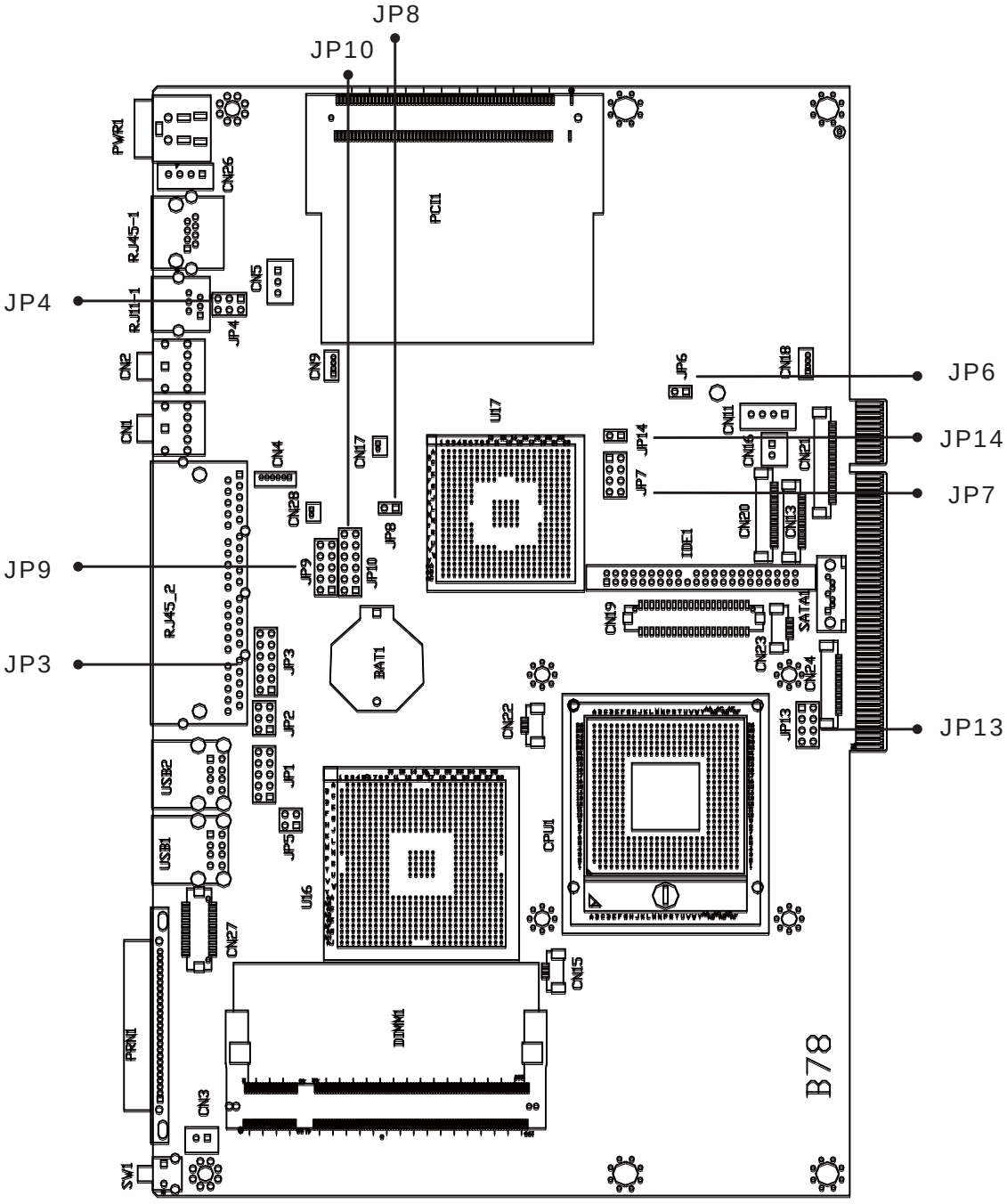
5-3. B68 motherboard Specification

Motherboard	**B68**			
CPU Supports	Intel Atom N270 processor 1.6GHz L2 512K			
Chipset	Intel 945GSE Express + ICH7M FSB 533MHz			
System Memory	2 x DDRII SO-DIMM slot, up to 2GB			
Graphic Memory	Share system memory max 224MB			
LCD / Touch Panel				
Model Name	K792	K795	K797	K799
LCD Size	12" TFT LCD	15" TFT LCD	17" TFT LCD	19" TFT LCD
Brightness	370nits	350nits	300nits	300nits
Maximal Resolution	800 x 600	1024 x 768	1280 x 1024	
Touch Screen Type	Resistive touch	Resistive type / SAW touch / IR Touch		
Storage				
HDD	2.5" Slim HDD bay, SATA HDD			
Flash Memory	1 Optional Compact Flash memory (without HDD)			
Expansion				
mini-PCI-E Slot	x1 (support 802.11 a/b/g WLAN card)			
External I / O Ports				
USB 2.0	4 x USB Type A			
Serial / COM	RJ-45 (COM1 standard RS-232; COM2 RS-232 / 422 / 485 selectable by jumper; COM3 & COM4 pin 9 with 5V or 12V power by jumper)			
Parallel	1 x D-sub 25F			
LAN (10 / 100/1000)	1 x RJ-45			
Cash Drawer	1 x RJ-11 (12V or 24V)			
DC Jack	1 x Latch Type			
Audio Jack	1 x Mic-in, 1 x Line-out			
2nd VGA	1 x DB 15F			
Internal Interface				
USB 2.0	2			
Audio				
Speaker	1 x 3W Speaker	2 x 3W Speakers		
Power				
Power Adapter	DC 19V / 90W			
Environment				
EMC & Safety	FCC Class A, CE, LVD			
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)			
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)			
Operating Humidity	5% - 95% RH non-condensing			
Storage Humidity	5% - 95% RH non-condensing			
Dust & Water Proof	NEMA 4 / IP 65 (front)			
Dimension (W x D x H)	331 x 265 x 55 mm 13" x 10.5" x 2.2"	386 x 308 x 60 mm 15.2"x 12.1"x 2.4"	411 x 345 x 60 mm 16.2" x 13.6" x 2.4"	449 x 374 x 60 mm 17.7" x 14.7"x 2.4"
Weight (N.W.)	4.7kgs / 10.4 lbs	5.8 kgs / 12.8 lbs	7.6 kgs / 16.7 lbs	9 kgs / 19.8 lbs
Mounting	100mm x 100mm Standard VESA / Panel Mount			
OS Support	Windows® XP Professional, Windows Embedded POSReady 2009, Windows XP Embedded, Windows XP Professional for Embedded, WinCE, Windows 7, Linux			

6. Jumper Setting

6-1. For B78 Motherboard

6-1-1. Motherboard Layout



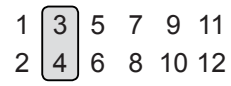
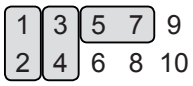
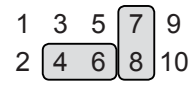
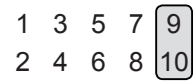
Version: B78 v2.2

6-1-2. Connectors & Functions

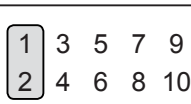
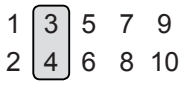
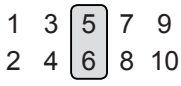
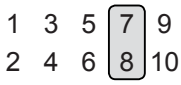
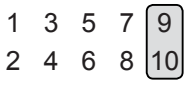
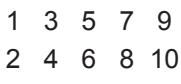
Connector	Function
BAT1	CMOS Battery Base (Use CR2023)
CN1	Audio Line Out
CN2	Audio MIC In
CN3	Internal Power Switch
CN4	Speaker & MIC Connector
CN9	CD-IN Connector
CN11	Power Connector For 3.5" HDD
CN13	COM5 for Touch
CN15	CPU FAN Connector
CN16	Hardware Reset
CN18	USB2
CN19	LCD Interface Connector
CN20	Inverter Connector
CN21	Card Reader Connector
CN22	System FAN Connector
CN23	IrDA Connector
CN26	Internal Power In Connector
CN27	Internal LPT Connector
CN28	Internal PCI Reset Output Connector
IED1	Secondary IDE Connector (Pitch = 2.0mm)
PRN1	Parallel Port
PWR1	+19V Power Adaptor
RJ11_1	Cash Drawer Connector
RJ45_1	LAN (On Board)
RJ45_2	COM1, COM2, COM3, COM4
SATA1	SATA Connector
USB1	USB3, USB4
USB2	USB5, USB6
JP1	VGA Port
JP2	VGA Power / DDC
JP3	Power Option for COM3/COM4
JP4	Power Option for Cash Drawer
JP6	AT/ATX Setting
JP7	Panel ID Setting
JP8	CMOS Operation Mode
JP9/JP10	COM2 RS232/485/422 Setting
JP14	USB Path Setting

6-1-3. Jumper Setting

COM2 RS232/485/422 Setting

Function	JP10	JP9
▲RS232		
RS485		
RS422		

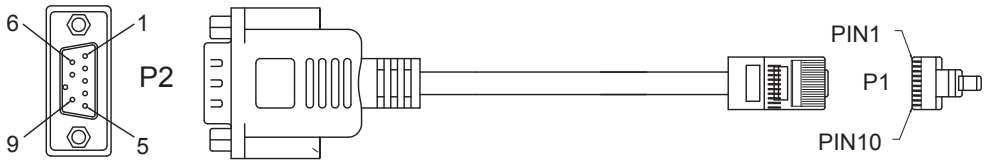
COM3 & COM4 Power Setting

Function		JP3
COM3 Pin10	▲RI	
	+5V	
	+12V	
COM4 Pin10	▲RI	
	+5V	
	+12V	

▲ = Manufacturer Default Setting

Note: Please see pin definition of COM3 and COM4 connector as next page.

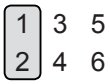
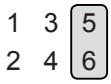
RJ45-DB9F serial cable



Pin Definition

RJ45 pin	RS_232	RS_485	RS_422	DB9 pin
2	DCD#	RS485_TXRX-	RS422_TX-	1
4	RX#	RS485_TXRX+	RS422_TX+	2
6	TX#	NC	RS422_RX+	3
8	DTR#	NC	RS422_RX-	4
9	GND	GND	GND	5
3	DSR#	NC	NC	6
5	RTS#	NC	NC	7
7	CTS#	NC	NC	8
10	RI#	NC	NC	9
1	---	NC	NC	---

Cash Drawer Power Setting

Function	JP4
▲+12V	
+24V	

Power Mode Setting

Function	JP6
▲ATX Power	
AT Power	

CMOS Operation Mode

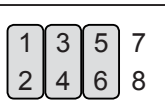
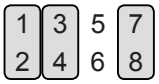
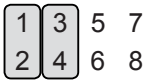
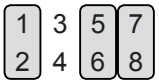
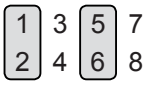
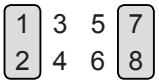
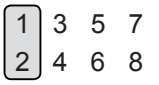
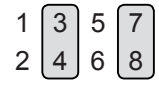
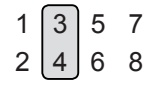
Function	JP8
▲CMOS Normal	
CMOS Reset	

USB Path Setting

Function	JP14
▲To Docking	
To Motherboard	

▲ = Manufacturer Default Setting

LCD ID Setting

Panel#	Resolution	LVDS		JP7
		Bits	Channel	
1	640 x 480	18	Single	
2	800 x 600	18	Single	
3	1024 x 768	18	Single	
4	1280 x 1024	24	Dual	
5	1024 x 768	24	Single	
6	800 x 600	24	Single	
7	800 x 600	18	Single	
8	800 x 600	18	Single	
9	1024 x 768	24	Single	
10	1440 x 900	24	Dual	
11	1280 x 1024	24	Dual	
12	1440 x 900	18	Dual	

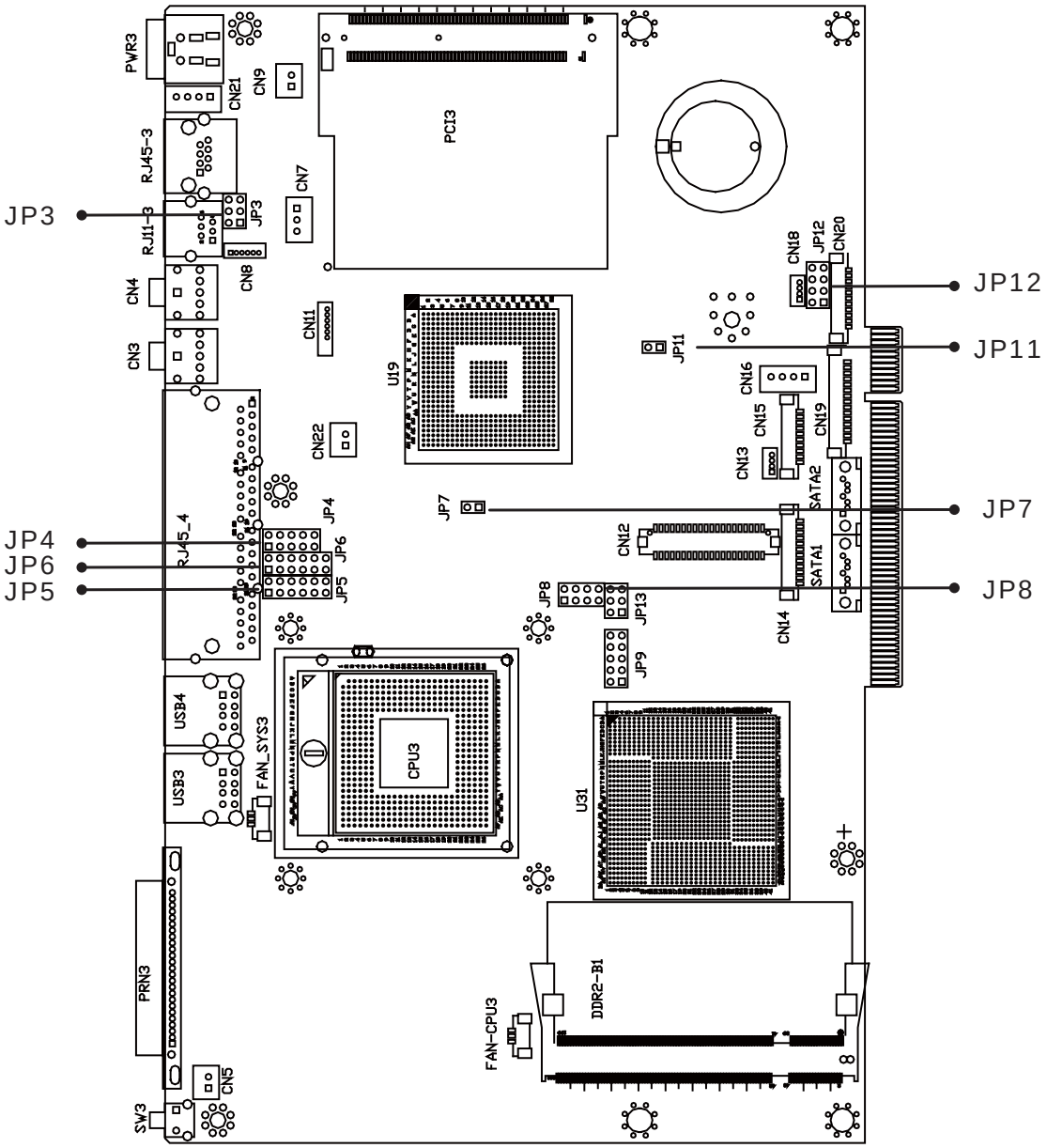
Remark:

Panel ID#8 is only applied for Sharp 12.1” LQ121S1LG41 / LQ121S1LG42 panel.

 Jumper open  Jumper short

6-2. For B98 Motherboard

6-2-1. Motherboard Layout



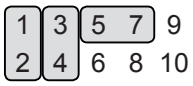
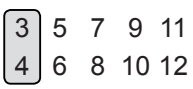
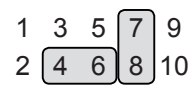
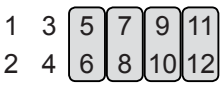
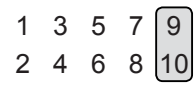
Version: B98 v1.0

6-2-2. Connectors & Functions

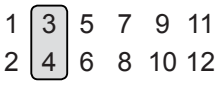
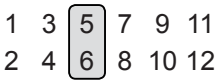
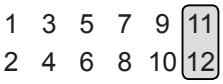
Connector	Purpose
BAT3	CMOS Battery Base (Use CR2023)
CN3	Audio Line Out
CN4	MIC In
CN5	Internal Power On Switch Connector
CN8	Speaker & MIC Connector
CN9	Internal LAN LED
CN11	CD-IN / Line-In Connector
CN12	LCD Interface Connector
CN13	IrDA Connector
CN14	Inverter Connector
CN15	COM5 for Touch
CN16	Power Connector For HDD
CN18	USB5
CN19	Card Reader Connector
CN20	Reserved
CN21	Internal Input Power Connector
CN22	Hardware Reset
DDR2_A1	DDR2 SO-DIMM
DDR2_B1	DDR2 SO-DIMM
FAN_CPU3	CPU FAN Connector
FAN_SYS3	System FAN Connector
MINI_PCIE3	Mini PCI-E Socket
PCI3	Mini PCI Socket
PRN3	Parallel Port
PWR3	+19V Power Adaptor
RJ11_3	Cash Drawer Connector
RJ45_3	LAN (On Board)
RJ45_4	COM1, COM2, COM3, COM4
SATA1	SATA Connector
SATA2	SATA Connector
SKT1	SPI ROM
SW3	Power On Button
USB3	USB1, USB2
USB4	USB3, USB4
JP3	Power Option for Cash Drawer
JP4/JP6	COM2 RS232/485/422 Setting
JP5	Power Option for COM3/COM4
JP7	CMOS Operation Mode
JP8	LCD ID Setting
JP9	VGA Port
JP13	VGA Power / DDC
JP11	AT/ATX Setting

6-2-3. Jumper Setting

COM2 RS232/485/422 Setting

Function	JP6	JP4
▲RS232		
RS485		
RS422		

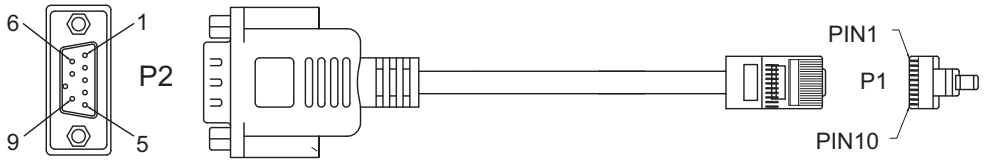
COM3 & COM4 Power Setting

Function		JP5
COM3 Pin10	▲RI	
	+5V	
	+12V	
COM4 Pin10	▲RI	
	+5V	
	+12V	

▲ = Manufacturer Default Setting

Note: Please see pin definition of COM3 and COM4 connecotr as next page.

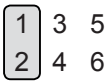
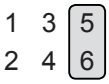
RJ45-DB9F serial cable



Pin Definition

RJ45 pin	RS_232	RS_485	RS_422	DB9 pin
2	DCD#	RS485_TXRX-	RS422_TX-	1
4	RX#	RS485_TXRX+	RS422_TX+	2
6	TX#	NC	RS422_RX+	3
8	DTR#	NC	RS422_RX-	4
9	GND	GND	GND	5
3	DSR#	NC	NC	6
5	RTS#	NC	NC	7
7	CTS#	NC	NC	8
10	RI#	NC	NC	9
1	---	NC	NC	---

Cash Drawer Power Setting

Function	JP3
▲+12V	
+24V	

Power Mode Setting

Function	JP11
▲ATX Power	
AT Power	

CMOS Operation Mode

Function	JP7
▲CMOS Normal	
CMOS Reset	

▲ = Manufacturer Default Setting

LCD ID Setting

Panel#	Resolution	LVDS		Output Interface	JP8
		Bits	Channel		
1	1366 x 768	24	Single	LVDS Panel	1 3 [5] [7] / 2 4 [6] [8]
2	1440 x 900	24	Dual	LVDS Panel	1 3 [5] 7 / 2 4 [6] 8
4	1920 x 1080	24	Dual	LVDS Panel	1 3 5 7 / 2 4 6 8
5	1024 x 768	24	Single	LVDS Panel	1 [3] [5] [7] / 2 [4] [6] [8]
6	1280 x 1024	24	Dual	LVDS Panel	1 [3] [5] 7 / 2 [4] [6] 8
7	800 x 600	24	Single	LVDS Panel	1 [3] 5 [7] / 2 [4] 6 [8]
9	1024 x 768	18	Single	LVDS Panel	[1] [3] [5] [7] / [2] [4] [6] [8]
11	800 x 600	18	Single	LVDS Panel	[1] [3] 5 [7] / [2] [4] 6 [8]
12	800 x 600	18	Single	LVDS Panel	[1] [3] 5 7 / [2] [4] 6 8
				CRT	[1] 3 5 7 / [2] 4 6 8

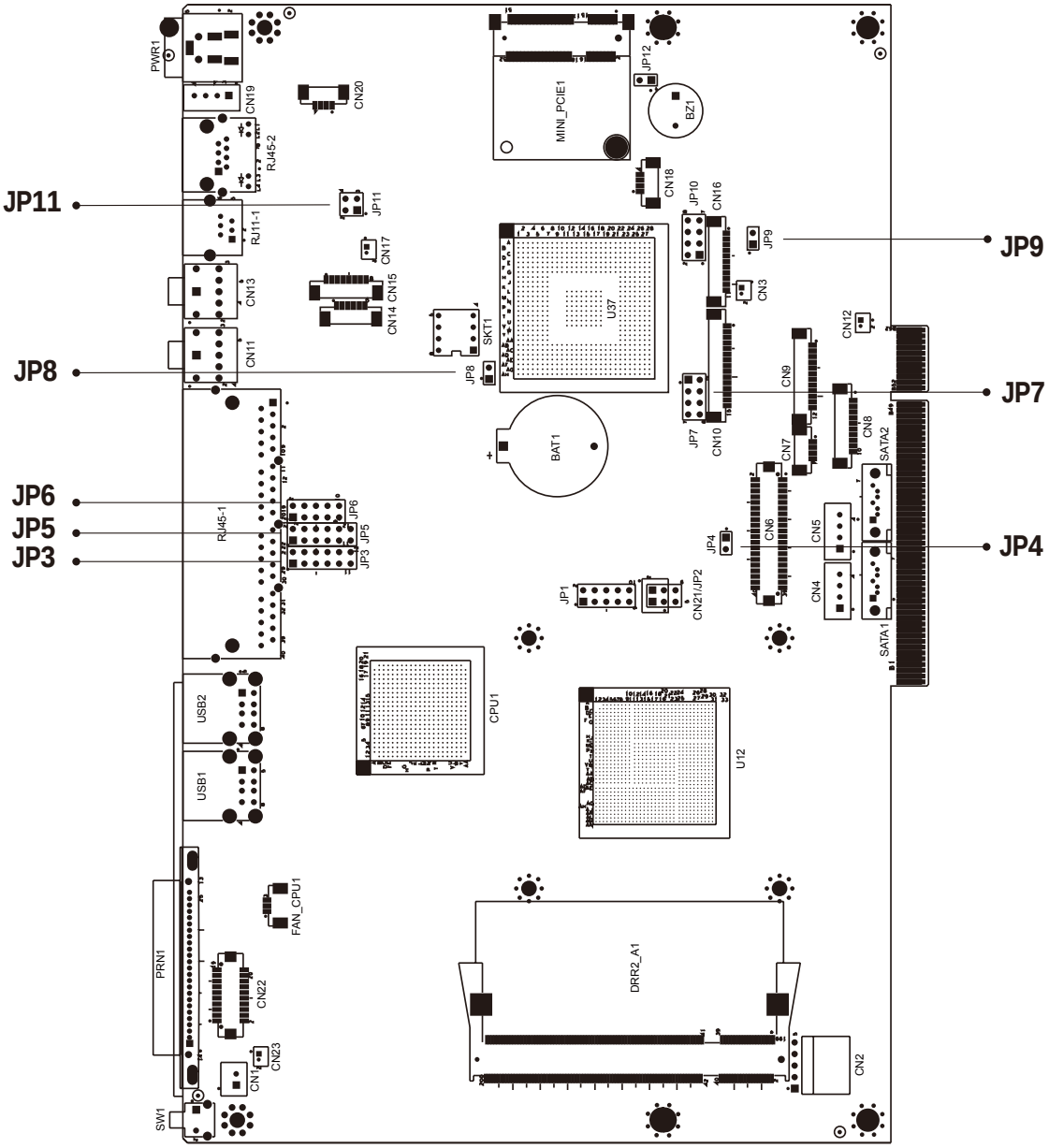
Remark:

Panel ID#12 is specialized for Sharp 12.1" LQ121S1LG41 / LQ121S1LG42 panel .

1 / 2 Jumper open [1] / [2] Jumper short

6-3. For B68 Motherboard

6-3-1. Motherboard Layout



Version: B68 v1.0

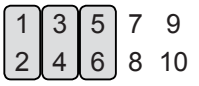
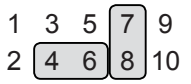
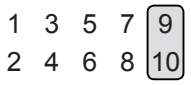
6-3-2. Connectors & Functions

Connector	Purpose
BAT1	CMOS Battery Base (Use CR2023)
CN1	Power On Button
CN2	Touch Sensor
CN3	Power LED
CN4	SATA1 HDD Power Connector
CN5	SATA2 HDD Power Connector
CN6	LCD Interface Connector
CN7	IrDA Connector
CN8	For External Touch Connector
CN9	Inverter Connector
CN10	Card Reader Connector
CN11	Line Out
CN12	LED Power
CN13	MIC In
CN14	Speaker & MIC CONN
CN15	CD-IN CONN
CN17	LAN LED
CN18	USB5
CN19	DC-Jack
CN20	PS2 KEYBOARD
CN21	For Bedside Terminal
CN22	LPT Interface for Touch
CN23	For LPT Touch Reset
DDR2_A1	DDR2 SO-DIMM1
DDR2_A2	DDR2 SO-DIMM2
PRN1	Parallel Port
PWR1	+19V Power Adaptor
RJ11_1	Cash Drawer Connector
RJ45_1	COM1, COM2, COM3, COM4
RJ45_2	LAN
SATA1	SATA Connector
SATA2	SATA Connector

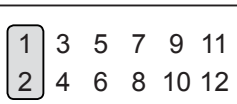
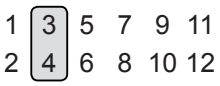
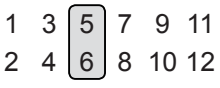
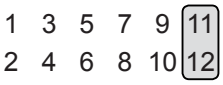
Connector	Purpose
SKT1	SPI ROM
USB1	USB1, USB2
USB2	USB3, USB4
SW1	Power On Bottom
JP1	CRT Connector
JP2	CRT Power/I2C Connector
JP3	Power Option for COM3/COM4
JP4	2nd Display Power
JP5	COM2 Connector
JP6	COM2(RS232/422/485) Setting
JP7	LCD ID Setting
JP8	RTC Reset
JP9	AT Function
JP11	Cash Drawer Power Setting (+12V,+24V)
JP12	Hardware Reset

6-3-3. Jumper Setting

COM2 RS232/485/422 Setting

Function	JP6	JP5
▲RS232		
RS485		
RS422		

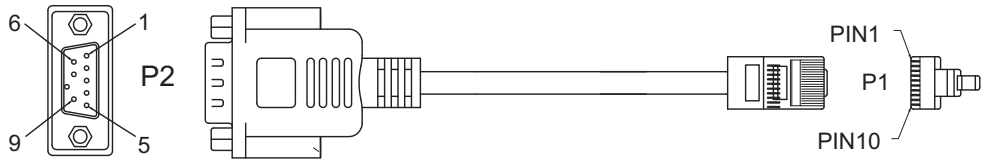
COM3 & COM4 Power Setting

Function		JP3
COM3 (Pin21~30)	▲RI	
	+5V	
	+12V	
COM4 (Pin21~30)	▲RI	
	+5V	
	+12V	

▲ = Manufacturer Default Setting

Note: Please see pin definition of COM3 and COM4 connecotr as next page.

RJ45-DB9F serial cable



Pin Definition

RJ45 pin	RS_232	RS_485	RS_422	DB9 pin
2	DCD#	RS485_TXRX-	RS422_TX-	1
4	RX#	RS485_TXRX+	RS422_TX+	2
6	TX#	NC	RS422_RX+	3
8	DTR#	NC	RS422_RX-	4
9	GND	GND	GND	5
3	DSR#	NC	NC	6
5	RTS#	NC	NC	7
7	CTS#	NC	NC	8
10	RI#	NC	NC	9
1	---	NC	NC	---

Cash Drawer Power Setting

Function	JP11
▲+12V	1 3 2 4
+24V	1 3 2 4

Power Mode Setting

Function	JP9
▲ATX Power	1 2
AT Power	1 2

CMOS Operation Mode

Function	JP8
▲CMOS Normal	1 2
CMOS Reset	1 2

VGA Power Setting

Function	JP4
▲No Power	1 2
+12V	1 2

▲ = Manufacturer Default Setting

LCD ID Setting

Panel#	Resolution	LVDS		Output Interface	JP7
		Bits	Channel		
1	1366 x 768	24	Single	LVDS Panel	1 3 [5] [7] / 2 4 [6] [8]
2	1440 x 900	24	Dual	LVDS Panel	1 3 [5] 7 / 2 4 [6] 8
4	1920 x 1080	24	Dual	LVDS Panel	1 3 5 7 / 2 4 6 8
5	1024 x 768	24	Single	LVDS Panel	1 [3] [5] [7] / 2 [4] [6] [8]
6	1280 x 1024	24	Dual	LVDS Panel	1 [3] [5] 7 / 2 [4] [6] 8
7	800 x 600	24	Single	LVDS Panel	1 [3] 5 [7] / 2 [4] 6 [8]
9	1024 x 768	18	Single	LVDS Panel	[1] [3] [5] [7] / [2] [4] [6] [8]
11	800 x 600	18	Single	LVDS Panel	[1] [3] 5 [7] / [2] [4] 6 [8]
12	800 x 600	18	Single	LVDS Panel	[1] [3] 5 7 / [2] [4] 6 8
				CRT	[1] 3 5 7 / [2] 4 6 8

Remark:

Panel ID#12 is specialized for Sharp 12.1" LQ121S1LG41 / LQ121S1LG42 panel.

1 / 2 Jumper open [1] / [2] Jumper short

Appendix A: Drivers Installation

The shipping package includes a Driver CD in which you can find every individual driver and utility that enables you to install the drivers on the system.
Please insert the Driver CD into the drive and double click on the “index.htm” to select the models. You can refer to the drivers installation guide for each driver in the “Driver/Manual List”.